

ABSTRACT

METHOD FOR CONDITIONING A DATABASE FOR AUTOMATIC SPEECH PROCESSING.

A neural network can be trained for synthesizing or recognizing speech with the aid of a database produced by automatically matching graphemes and phonemes. First, graphemes and phonemes are matched for words which have the same number of graphemes and phonemes. Next, graphemes and phonemes are matched for words that have more graphemes than phonemes in a series of steps that combine graphemes with preceding phonemes. Then, graphemes and phonemes are matched for words that have fewer graphemes than phonemes. After each step, infrequent and unsuccessful matches made in the preceding step are are erased. After this process is completed, the database can be used to train the neural network and graphemes, or letters of a text can be converted into the corresponding phonemes with the aid of the trained neural network.